



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,477	04/27/2001	Robert Anderson Malaney	3961.46US01	9130
23552 7590 12/05/2007 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER HOM, SHICK C	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 12/05/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/844,477

Applicant(s)

MALANEY ET AL.

Examiner

Shick C. Hom

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 8, 15, 29, 36, 43, 57-59 and 73-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 57-59 is/are allowed.
- 6) ☒ Claim(s) 1, 8, 15, 29, 36, 43 and 73-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/6/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/6/07 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 8, 15, 29, 36, 43, 57-59, and 73-90 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 8, 15, and 73-81 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatono et al. (5,737,314).

Regarding claims 1, 8, and 15:

Hatono et al. disclose a method, means, and computer program for shaping input packet traffic to form output packet traffic (col. 1 lines 15-42 recite the traffic control function to set the communication of cells to within a certain range to prevent received cells from being discarded because of limited buffers or buffer size; further Fig. 10 and col. 15 lines 5-14 recite the system including the cpu and software memory), said method comprising steps of:

specifying a probability parameter representing, in regard to a downstream buffer receiving said output packet traffic, the slope in the upper bound of (i) probability of buffer occupancy of the downstream buffer being exceeded versus (ii) buffer occupancy of the downstream buffer (the abstract recite means for reducing cell loss probability by observing queue of cells in the downstream buffer using overflow testing circuit for

obtaining distribution of the queue size and the cell loss probability, i.e. probability parameter);

specifying a rate parameter representing the mean rate of the output packet traffic, wherein the rate parameter and the probability parameter satisfy a relationship imposing a predetermined probabilistic limit on burstiness of the output packet traffic (col. 1 lines 43-59 recite controlling the rate of traffic flow to reduce the average cell rate and burst size based upon cell loss probability, i.e. the probability parameter); and

constraining, based upon the probability parameter and the rate parameter, transmission of the input packet traffic, thereby to produce said output packet traffic (col. 8 line 60 to col. 9 line 7 recite restricting the traffic of cells inputted to the queue based upon the probability distribution and cell loss probability).

Regarding claims 73-81:

Hatono et al. disclose wherein the predetermined probabilistic limit imposed by the relationship satisfied by the rate parameter and the probability parameter is exponential bounded burstiness (col. 2 line 49 to col. 3 line 46 recite the

bust interval being related to an exponential distribution as in claims 73-90)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the

applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 29, 36, 43, and 82-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatono et al. (5,737,314) in view of Chao (5,381,407).

Regarding claims 29, 36, 43, and 82-90:

For claims 29, 36, 43, and 82-90, Hatono et al. disclose the packet traffic policer and method described in paragraph 4 of this office action. Hatono et al. disclose all the subject matter of the claimed invention with the exception of means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream as in claims 29, 36, and 43.

Chao from the same or similar fields of endeavor teach that it is known to provide means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream (col. 4 lines 44-62 which recite tagging cells as in claims 29, 36, and 43).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to

provide means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream as taught by Chao in the means and method of shaping packet traffic of Hatono et al.

The means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream can be implemented by connecting the means and method for tagging packets of Chao to the controller for shaping packet traffic of Hatono et al.

The motivation for providing means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream as taught by Chao in the means and method of shaping packet traffic of Onyiagha being that it provides more efficiency for the system since tagging increases network throughput and decreases cell loss rate and because violation-tagging is "softer" than immediately discarding in that depending on the network congestion conditions, very few tagged cells may actually be discarded in the network. In addition, the traffic parameters agreed upon at the call set-up time may be relaxed, allowing more margining for false alarms, i.e., incorrectly identifying

non-violated cells to violated cells as recited in Chao col. 4 lines 44-62).

Allowable Subject Matter

7. Claims 57-59 are allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hsu et al. disclose admission control for multi-class ATM traffic with overflow constraints.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

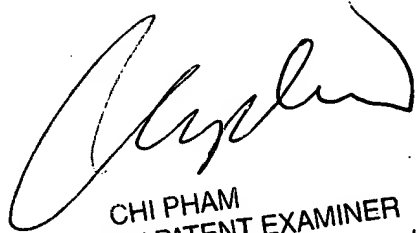
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pham Chi can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control
Number: 09/844,477
Art Unit: 2616

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH SH


CHI PHAM
SUPERVISORY PATENT EXAMINER
11/30/07